



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-0069; Directorate Identifier 2016-NE-01-AD]

RIN 2120-AA64

Airworthiness Directives; Continental Motors, Inc. Reciprocating Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Continental Motors, Inc. (CMI) TSIO-550-K, TSIOF-550-K, TSIO-550-C, TSIOF-550-D, and TSIO-550-N reciprocating engines. This proposed AD was prompted by a report of an uncommanded in-flight shutdown (IFSD) resulting in injuries and significant airplane damage. This proposed AD would require replacing the oil cooler cross fitting assembly. We are proposing this AD to prevent failure of the oil cooler cross fitting and engine, IFSD and loss of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD contact Continental Motors, Inc., 2039 Broad Street, Mobile, Alabama 36615; phone: 800-326-0089; Internet: <http://www.continentalmotors.aero>. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-0069; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Scott Hopper, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5535; fax: 404-474-5606; email: scott.hopper@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this NPRM. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-0069; Directorate Identifier 2016-NE-01-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all

comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this NPRM.

Discussion

A Cirrus SR-22T crashed on November 3, 2015 due to an uncommanded IFSD. The crash caused four minor personal injuries and substantial airplane damage. The root cause of the engine IFSD was the loss of engine oil through the fatigue-induced fracture of an oil cooler cross fitting nipple. This condition, if not corrected, could result in failure of the oil cooler cross fitting and engine, IFSD, and loss of the airplane.

Relevant Service Information under 1 CFR Part 51

We reviewed CMI Critical Service Bulletin (CSB) No. CSB15-2C, dated November 9, 2015 and CMI CSB No. CSB15-7A, dated November 10, 2015. The CSBs describe detailed procedures for replacing oil cooler cross fittings, nipples, and bushings with a redesigned oil cooler cross fitting. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this document.

FAA's Determination

We are proposing this NPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This NPRM would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the Service Information.”

Differences Between this Proposed AD and the Service Information

CMI CSB No. CSB15-7A, dated November 10, 2015 requires replacing the oil cooler cross fitting, nipple, and bushing prior to further flight. CMI CSB No. CSB15-2C, dated November 9, 2015 requires replacing the oil cooler cross fitting, nipple, and bushing within 25 hours of engine operation or at the next scheduled inspection or engine service, whichever occurs first. This proposed AD requires replacing the fitting at the next engine maintenance event not to exceed 12 months or 100 flight hours after the effective date of this AD, whichever occurs first.

Costs of Compliance

We estimate that this proposed AD affects 1,307 engines installed on airplanes of U.S. registry. We also estimate that it will take about 1 hour per engine to comply with this proposed AD. The average labor rate is \$85 per hour. Parts would cost about \$0 per engine. Based on these figures, we estimate the total cost of this proposed AD to U.S. operators to be \$111,095. Our cost estimate is exclusive of possible warranty coverage.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Continental Motors, Inc. (Type Certificate previously held by Teledyne Continental Motors) Reciprocating Engines: Docket No. FAA-2016-0069; Directorate Identifier 2016-NE-01-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Continental Motors, Inc. (CMI) TSIO-550-K, TSIOF-550-K, TSIO-550-C, TSIOF-550-D, and TSIO-550-N reciprocating engines with an engine serial number below 1012296 and an oil cooler cross fitting, part number AN918-1J, installed.

(d) Unsafe Condition

This AD was prompted by a report of an uncommanded in-flight shutdown (IFSD) resulting in injuries and significant airplane damage. We are issuing this AD to prevent failure of the oil cooler cross fitting and engine, IFSD and loss of the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Within 12 months or 100 flight hours from the effective date of the AD, whichever occurs first, replace the oil cooler cross fitting, nipple, and bushing. Use the Action Required paragraphs III.1 through III.8 of CMI Critical Service Bulletin (CSB) No. CSB15-7A, dated November 10, 2015 or the Action Required paragraphs III.1

through III.8 of CMI CSB No. CSB15-2C, dated November 9, 2015, to perform the replacement.

(2) Reserved.

(f) Credit for Previous Actions

You may take credit for the replacement that is required by paragraph (e) of this AD, if the replacement was performed before the effective date of this AD using CMI CSB No. CSB15-2B, dated November 6, 2015 or earlier versions; or CSB No. CSB15-7, dated November 6, 2015.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Atlanta Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

(1) For more information about this AD, contact Scott Hopper, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5535; fax: 404-474-5606; email: scott.hopper@faa.gov.

(2) CMI CSB No. CSB15-7A, dated November 10, 2015 and CMI CSB No. CSB15-2C, dated November 9, 2015 can be obtained from CMI using the contact information in paragraph (h)(3) of this AD.

(3) For service information identified in this AD, contact Continental Motors, Inc., 2039 Broad Street, Mobile, Alabama 36615; phone: 800-326-0089; Internet: <http://www.continentalmotors.aero>.

(4) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on March 2, 2016.

Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2016-05467 Filed: 3/10/2016 8:45 am; Publication Date: 3/11/2016]